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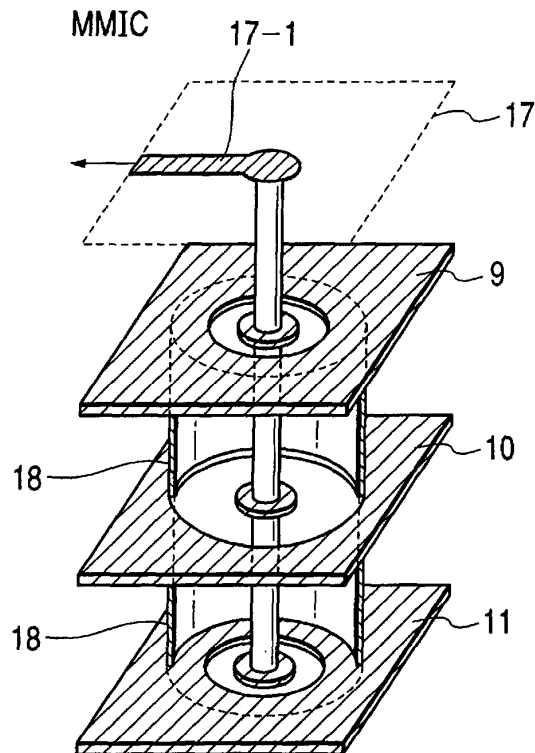
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(54) **High frequency circuit module**

(57) A high frequency circuit module for use in an automotive radar or the like, in which RF circuit parts (5, 13, 14) are mounted on both sides of a hard multilayer dielectric substrate (2), and a transmission line (16, 18, 19, 20) connecting the RF circuit parts provided on both sides is constructed by a via group (20) including a periodical structure or a via (18, 19) having a coaxial structure perpendicular to faces of the multilayer dielectric substrate. As the multi-layer dielectric substrate, a hard multilayer substrate using metallic layers as a microstrip line wiring layer, a DC/IF signal line layer, and grounding metal layers for shielding which are disposed on and under the DC/IF signal line is employed. By using the transmission line achieved by a through via having the periodical structure or the through via having the coaxial structure, an electromagnetic wave propagating in parallel between the grounding conductors is confined.

**FIG. 2A**





European Patent  
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# EUROPEAN SEARCH REPORT

Application Number  
EP 02 00 3265

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Place of search		Date of completion of the search	Examiner
MUNICH		8 December 2003	Cordeiro, J-P
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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